FSB Role Description – FSW Test Team Lead (TTL)

Roles & Responsibilities

- Direct technical and leadership responsibility, from both a Project and FSB point of view, for the successful build verification test and/or system validation test of mission FSW (e.g., C&DH, GN&C, instrument) by an integrated Civil Servant and contractor FSW test team.

- Reports directly to the FSW Product Development Lead. Reports to Spacecraft or Instrument Manager at the discretion of the FSW PDL. Reports to FSB management in conjunction with the PDL.

- Responsible for the FSW systems engineering associated with the FSW test scenarios, ground test system capabilities, simulation requirements, user aspects of the ground/flight interfaces, FSW test tools and utilities, etc. for the assigned FSW products.

- Actively drives the required fidelity, quantity and delivery dates of flight-like hardware and simulations for the full set of FSW test environments. Clearly states risks associated with less-than-full- fidelity in any area of testbed availability.

- Advocates and implements the FSB standards and guidelines associated with FSW test of the assigned FSW products. Coordinates FSW test practices with other FSW Leads to ensure that the processes are being followed and a consistent end-product FSW system is achieved. Recommends improvements to FSB processes. Accommodates 'tailoring' of FSW processes to match Project demands via waivers submitted to the FSB CCB. Tracks waivers as risks when requested.

- Plans the required staff and schedule profiles to accomplish the FSW Test Program. Identifies and tracks schedule dependencies. Tracks test product progress monthly (and sometimes weekly). Reports staff, schedule and cost status at least monthly.

- Develops, in conjunction with other FSW Leads, the mission-specific management and technical plans for FSW test. Provides FSW test and testbed contents of the FSW Product Plan, developed in conjunction with other FSW Leads.

- Develops the mission-specific FSW test approach and documents test decisions in the FSW Test Plan, in conjunction with other FSW Leads.

- Ensures test team awareness and implementation of all relevant aspects of the FSW Product Plan and FSW Test Plan.

- Responsible for evaluating and critiquing the clarity, completeness, robustness and testability of the full set of FSW requirements, interface requirements and control documentation, and operations concepts as well as any other specifications that may drive FSW test activities. Ensures (via DCRs if necessary) that the FSW requirements are easily readable by reviewers and that FSW test staff finds no vagueness or ambiguity in what is being developed and to be tested.

- Responsible for review and approval of FSW test scenarios to ensure that effective and complete build level testing of FSW requirements and/or system level testing of the FSW for post-launch support of the mission are planned.

- Ensures effective FSW test procedures, simulations and results analysis. Coordinates analyst 'specialty sign-off' of FSW test results as appropriate.

- Reviews and gives final approval of all FSW test reports and DCR write-ups.

- Ensures effective and rigorous configuration management and control of

all FSW products and tools. Develops CM documentation. Reports and tracks all problems and changes to the FSW, databases, test environments, tools, simulators, requirements, etc.

- Maintains thorough metrics of FSW issues (e.g., DCRs) found by the FSW test team(s).

- Works with the FSW Lab Manager to ensure effective IT Security on all equipment, effective version control of all equipment, software and data files, proper use of equipment logs, property tracking, etc.

- Identifies risk areas, including dependencies, associated with the assigned FSW and the FSW test program(s). Recommends risk mitigations. Implements risk mitigations in all areas under his control. Measures, tracks and reports status of each risk.

- Implements risk mitigation in all areas under his control.

- Reports monthly on status of the FSW system, associated FSW elements and each risk – even when Project decisions to accept the risks have been made.

- Supports W Va IV&V as required.

- Provides hardware/software test support during flight data system development, special flight hardware/software tests, and I&T.

- Mentors staff as necessary to ensure quality and productivity. Enables team members to grow in skills and responsibilities such that increased capabilities of staff are evident following their team assignments.

- Provides constructive inputs to branch management regarding the performance contributions of each member of the team. Additionally provides constructive suggestions for improvement and growth. Provides substantive recommended performance plan elements for each staff member on a fiscal year basis. As requested or appropriate, provides similar input to contractor management regarding contractor staff performance on the team.

- Provides recommendations to the FSW Branch Standards CCB regarding desired improvements to approved and draft FSW Branch standards and processes. Identifies the need for new FSW development, test, operations, and maintenance standards and processes.

Ownership and Approval Authority

The FSW Branch Head is the owner of this role description. The FSB Standards CCB has approval authority.

Change History

Version	Date	Change
1.2	06/29/06	DCR #171.
1.1	06/28/04	DCR #80 – change name from Position Description to Role Description.
1.0	01/27/04	Initial draft.